

**Opening Remarks**  
**By U.S. Representative Judy Biggert (R-IL-13<sup>th</sup>)**  
***Should Congress Establish “ARPA-E,”***  
***The Advanced Research Projects Agency – Energy?***  
***Committee on Science***  
***Thursday, March 9, 2006***

Thank you, Mr. Chairman, and thank you for holding this hearing, for I know you share my deep concern for our nation’s future energy security. I am pleased to be working with you to examine this interesting proposal by the National Academies of Science to support “transformational research that could lead to new ways of fueling the nation and its economy.” On that goal, I see no debate.

However, I just don’t see how the creation of a new agency – a new bureaucracy – achieves this goal, even if it is patterned after the famed DARPA. I remain open to the ARPA-E concept, but I will readily admit that I need some convincing.

Why am I so skeptical? Let me count the ways. First, it is not clear what problems we are trying to solve with the creation of an ARPA-E.

Is it a lack of private sector investment in long-term or basic research? If so, how do we solve the problem by creating a brand new agency to distribute scarce federal resources to companies to conduct research they wouldn’t otherwise conduct? Correct me if I’m wrong, but doesn’t the Academy’s version of ARPA-E put the federal government in the position of picking what companies are winners?

Is it a lack of federal funding for high-risk, transformational research? If so, how would you characterize DOE’s current FreedomCAR and Hydrogen Initiatives? How about the President’s Global Nuclear Energy Partnership, or U.S. participation in ITER, the international fusion experiment? I don’t know about my colleagues, but I would put these in the category of high-risk, transformational research.

Is it a failure by the Department of Energy to effectively transfer new energy technologies from the laboratory to the market? If so, wouldn’t it make more sense to closely examine the legal and policy obstacles to the transfer of technology from our universities, national laboratories, and other research institutions?

In short, is this a solution in search of a problem?

Second, this proposal to create an ARPA-E is largely based on the mythology of the agencies – namely the myths that DARPA can’t do anything wrong, and that DOE can’t do anything right.

Well, let me relay a story about a DARPA failing. A number of scientists in my district developed a way to produce inexpensive, high-quality, titanium powder. You would think any technology to improve the processing or reduce the cost of titanium would be of obvious value to the DOD because titanium is strong and lighter than steel.

The scientists took their idea to DARPA, and DARPA turned them down. But they knew they had a good idea. They brought their idea to Congressman Bartlett and me. Despite the fact that the Army quickly recognized the “transforming” potential of this technology, DARPA had to be convinced. Only after the scientists had obtained private sector capital, built a pilot plant, and demonstrated that the technology worked did DARPA decide to provide a relatively small sum of funding. By my book, that’s not very “high-risk.”

How does the story end? Well, just this week, the DOE’s National Energy Technology Laboratory and Boeing – the largest consumer of titanium in the world – joined the Army in my office to discuss plans to rapidly scale-up the technology DARPA rejected in 2003.

Third, we tried to replicate DARPA at the Department of Homeland Security. Did it work? Not according to most accounts. If it didn’t work at DHS, why do we think it will work at DOE, where the private sector – rather than the government – will be the primary customer?

Fourth, where exactly are we going to get the money for ARPA-E? Many of my colleagues here today advocating for the creation of an ARPA-E couldn’t stop criticizing the Administration just last month for failing to “adequately” fund such energy programs as energy efficiency and renewable energy. With growing demands on our limited federal resources, is there really “new money” available for this agency? Realistically, no; the money will come from other basic and applied DOE research programs.

Finally, I think it is important to note that ARPA-E was one of 20 recommendations in the National Academy of Science’s “Gathering Storm” report, and it was the only one not to receive the unanimous support of the committee. Norm Augustine, who chaired the NAS panel, testified to this fact before the Committee in October of last year. And, interestingly enough, opposition came from the one member of the committee with arguably the most expertise in energy markets and the energy industry.

As Chairman of the Energy Subcommittee, I take my responsibility for overseeing the research and development programs at the DOE very seriously. I can’t think of anything more important to our national security, our economy, and our standard of living than energy. And I know everyone here is genuinely interested in finding solutions to our Nation’s energy challenges.

But we need to find the “right” solutions, not just any solution. If ARPA-E is the right solution, I will support it. But to get to the “right” solution, we have an obligation to ask tough questions. That’s my purpose here today.

I’m anxious for this distinguished panel to share their insight with us. You represent a wealth of talent and experience, and we are privileged to have you here with us today. Thank you for participating. With that, I yield back the balance of my time.